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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,829	09/23/2003	Yuichi Abe	112857-438	4984

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EXAMINER
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LAU, TUNG S

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/668,829	Applicant(s) ABE ET AL.	
	Examiner Tung S Lau	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 10-12 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 7, 9 and 13-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>see office action</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Information Disclosure Statement

1. The IDS filed on 8-16-2004 has been accepted and signed by the examiner.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 3, 4, 5, 6, 8, 10, 11, 12, 16, 17 and 18 are rejected under 35

U.S.C. 102(e) as being anticipated by Ogura et al. (U.S. Patent 6,671,650).

Regarding claim 1:

Ogura discloses an information processing system comprising: a first information processor; and a second information processor (fig. 2, unit 10), wherein the first information processor measures a spatial position of an object so as to output a measured value (Col. 5, Lines 40-54), and wherein the second information processor, processes the measured value, which has been output from the first information processor and indicates the position of the object in a measurement space (Col. 5, Lines 40-54, fig. 2, unit 6), and further processes a real-space value, which corresponds to the measured value and indicates the position of the

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object in a real space (Col. 5, Lines 40-54, fig. 2, unit 6), computes correspondence between the measurement space and the real space based on the measured value and the real-space value (Col. 5, Lines 40-54, fig. 2, unit 6), and corrects an error of the measured value based on the computed correspondence between the measurement space and the real space (Col. 6-7, Lines 66-15, fig. 5, Col. 5, Lines 40-54), the error resulting from the ambient environment of the first information processor (Col. 6-7, Lines 66-15, fig. 5, Col. 5, Lines 40-54).

Regarding claim 2:

Ogura discloses an information processing method performed by an information processing system comprising a first information processor (fig. 2, unit 10) and a second information processor (fig. 2, unit 14, 16, 20), wherein the first information processor measures a spatial position of an object so to output a measured value (Col. 5, Lines 40-54), and wherein the second information processor, processes the measured value, which has been output from the first information processor and indicates the position of the object in a measurement space, and processes a real-space value, which corresponds to the measured value and indicates the position of the object in a real space (Col. 5, Lines 40-54), computes correspondence between the measurement space and the real space based on the measured value and the real-space value (Col. 5, Lines 40-54), and corrects an error of the measured value based on the computed correspondence between

the measurement space and the real space, the error resulting from the ambient environment of the first information processor (Col. 7, Lines 5-15).

Regarding claim 3:

Ogura discloses an information processor comprising: measured-value input means for inputting a measured value indicating a spatial position of an object, the measured value being measured by and output from a first 3D-position measuring device (Col. 2-3, Lines 65-54); real-space-value input means for inputting a real-space value which corresponds to the measured value input by the measured-value input means and which indicates the position of the object in a real space (Col. 2-3, Lines 65-54); correspondence computing means for computing correspondence between the measurement space and the real space based on the measured value input by the measured-value input means and the real-space value input by the real-space-value input means (Col. 2-3, Lines 65-54); and correcting means for correcting an error of the measured value input by the measured-value input means based on the correspondence between the measurement space and the real space computed by the correspondence computing means, the error resulting from the ambient environment of the first 3D-position measuring device (Col. 2-3, Lines 65-54, Col. 5, Lines 40-54).

Regarding claim 17:

Ogura discloses an information processing method performed by an information processor, which corrects a measured value indicating a spatial position of an object, the measured value being measured by and output from a 3D-position

measuring device, the method comprising: a measured-value input step of inputting the measured value which has been output from the 3D-position measuring device and which indicates the position of the object in a measurement space (Col. 2-3, Lines 65-54, Col. 5, Lines 40-54); a real-space-value input step of inputting a real-space value which corresponds to the measured value input in the measured-value input step and which indicates the position of the object in a real space (Col. 2-3, Lines 65-54, Col. 5, Lines 40-54); a correspondence computing step of computing correspondence between the measurement space and the real space based on the measured value input in the measured-value input step and the real-space value input in the real-space-value input step (Col. 2-3, Lines 65-54, Col. 5, Lines 40-54); and a correcting step of correcting an error of the measured value input in the measured-value input step based on the correspondence between the measurement space and the real space computed in the correspondence computing step, the error resulting from the ambient environment of the 3D-position measuring device (Col. 2-3, Lines 65-54, Col. 5, Lines 40-54).

Regarding claim 18:

Ogura discloses a program measured value which indicates a spatial position of an object, the program comprising: a correspondence computing step of computing correspondence between a measurement space and a real space based on the measured value which has been measured by the 3D-position measuring device (Col. 2-3, Lines 65-54, Col. 5, Lines 40-54) and which

indicates the position of the object in the measurement space and on a real-space value which corresponds to the measured value and which indicates the position of the object in the real space (Col. 2-3, Lines 65-54, Col. 5, Lines 40-54); and a correcting step of correcting an error of the measured value measured by the 3D-position measuring device based on the correspondence between the measurement space and the real space computed in the correspondence computing step, the error resulting from the ambient environment of the 3D-position measuring device (Col. 2-3, Lines 65-54, Col. 5, Lines 40-54, Col. 7, Lines 5-15).

Regarding claim 5, Ogura discloses the calculation of the position in real-space value (fig. 3, unit 4, Col. 2-3, Lines 65-54); Regarding claim 8, Ogura discloses mechanical 3d-position device (fig. 3, unit 4); Regarding claim 10, Ogura discloses selected measure value and real space value (fig. 3, unit 4, Col. 2-3, Lines 65-54); Regarding claims 11, 12, Ogura discloses plurality of space value measuring (fig. 3, unit 4, Col. 2-3, Lines 65-54); Regarding claim 16, Ogura discloses output information notifying the user (Col. 9, Lines 40-47); Regarding claim 4, Ogura discloses magnetic 3-d position device (Col. 1, Lines 9-14), Regarding claim 6, Ogura discloses optical 3d position device (Col. 1, Lines 9-14).

***Claim Objections***

3. Claims 7, 9, 13, 14, 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach ultrasonic 3-d position device. Computing means estimates a measured value which has not been input by the measured-value input means and a real-space value which has not been input by the real-space-value input means based on at least one measured value input by the measured-value input means and at least one real-space value input by the real-space value input means, and computes the correspondence between the measurement space including the input measured value and the estimated measured value and the real space including the input real-space value and the estimated real-space value.

Correspondence computing means sequentially updates the correspondence between the measurement space and the real space every time a predetermined condition is satisfied, and the correcting means corrects the measured value input by the measured-value input means based on the latest correspondence between the measurement space and the real space.

Claims 14-15 are objected due to their dependency on claim 13.




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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL

  
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